

L Number	Hits	Search Text	DB	Time stamp
-	22828	dwell adj time	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 08:55
-	7313	(dwell adj time) same ATM or kiosk	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 10:51
-	68	((dwell adj time) same ATM or kiosk) same (number near5 (people or persons or individuals))	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 09:22
-	61	((dwell adj time) same ATM or kiosk) same (number near5 (people or persons or individuals))) and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or @PRAD<20011230)	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 09:20
-	620	((dwell adj time) same ATM or kiosk) and ((queue or line or wait\$) near5 (analy\$ or determin\$ or detect\$))	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 10:56
-	549	((dwell adj time) same ATM or kiosk) and ((queue or line or wait\$) near5 (analy\$ or determin\$ or detect\$))) and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or @PRAD<20011230)	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 10:56
-	202	((dwell adj time) same ATM or kiosk) and ((queue or line or wait\$) near5 (analy\$ or determin\$ or detect\$))) and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or @PRAD<20011230)) and ((number near5 (people or persons or individuals)) or (length near4 (line or queue\$)))	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 09:23
-	4504	((dwell adj time) same ATM or kiosk) and ((custom\$ or modif\$ or tailor or adapt\$ or program\$) with (message or display or communication or feature or function or presentation or demonstration or ad or advertisement))	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 10:55
-	535	((dwell adj time) same ATM or kiosk) and ((custom\$ or modif\$ or tailor or adapt\$ or program\$) with (message or display or communication or feature or function or presentation or demonstration or ad or advertisement))) and ((queue or line or wait\$) near5 (analy\$ or determin\$ or detect\$))	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 10:56
-	473	((dwell adj time) same ATM or kiosk) and ((custom\$ or modif\$ or tailor or adapt\$ or program\$) with (message or display or communication or feature or function or presentation or demonstration or ad or advertisement))) and ((queue or line or wait\$) near5 (analy\$ or determin\$ or detect\$))) and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or @PRAD<20011230)	USPAT; US-PGPUB; EPO; DERWENT	2004/04/04 10:56

*front-kiosk
side-by-side*

DOCUMENT-IDENTIFIER: US 20030036936 A1

TITLE: Computer method and apparatus to
estimate customer arrival times using transactional data

----- KWIC -----

Application Filing Date - APD (1):
20010817

Summary of Invention Paragraph - BSTX (3):

[0002] The present invention generally relates to a method of estimating customer arrival times at a terminal (e.g., a cash register) using transactional data from the terminal. The present invention may be implemented to estimate queue length at checkout lanes in a retail establishment, in a bank, at customer service desks, at self-service kiosks, at banks, or any other location where a queue (line) of people or other objects may form.

Summary of Invention Paragraph - BSTX (7):

[0006] The general problem of estimating customer arrival times from transaction data has not been considered by others. For our discussion, we define customer as a person, group of people, object, or group of objects that eventually results in one transaction. The general problem of estimating the queue length at a terminal has been considered by a number of people. There are two main methods conventionally recognized: video methods and one software method. Video methods include those patented by Huang and Florencio of NCR Corporation in U.S. Pat. Nos. 5,953,055 and 6,195,121, both entitled "System

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